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Dated: December 20, 2007

Electronic Signature for Shelly L. Hokenstad: /Shelly L. Hokenstad/

Docket No.: 65899-0702  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Imtiaz Zafar

Application No.: 10/717,242

Confirmation No.: 6879

Filed: November 19, 2003

Art Unit: 2618

For: Integrated AM/FM/SDARS Antenna and  
Receiver System

Examiner: T. Gesesse

**AMENDED APPEAL BRIEF**

MS Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In response to the Notification of Non-Compliant Appeal Brief dated November 20, 2007, Applicants have revised the Appeal Brief filed October 30, 2007, and respectfully submit the present amended Appeal Brief, which is believed to conform to 37 CFR § 41.37.

This Appeal Brief is filed pursuant to 37 C.F.R. § 41.37 in furtherance of the Notice of Appeal filed in the above-identified application on August 2, 2007, and appeals the final decision of the primary Examiner in the final Office Action dated July 2, 2007 ("Final Office Action"). This application was filed November 19, 2003.

**TABLE OF CONTENTS**

REAL PARTY IN INTEREST.....	PAGE 3
RELATED APPEALS AND INTERFERENCES .....	PAGE 4
STATUS OF CLAIMS .....	PAGE 5
STATUS OF AMENDMENTS.....	PAGE 6
SUMMARY OF CLAIMED SUBJECT MATTER.....	PAGE 7-8
GROUND OF REJECTION TO BE REVIEWED ON APPEAL .....	PAGE 9
ARGUMENT.....	PAGES 10-12
CONCLUSION .....	PAGE 13
CLAIMS APPENDIX .....	PAGES 14-17
EVIDENCE APPENDIX .....	PAGE 18
RELATED PROCEEDINGS APPENDIX.....	PAGE 19

I. REAL PARTY IN INTEREST

The real party in interest for this appeal is Delphi Automotive Systems.

## II. RELATED APPEALS AND INTERFERENCES

Applicants (hereinafter “Appellants”) are not aware of any related appeals or interferences that would affect the Board’s decision on the current appeal.

### III. STATUS OF CLAIMS

Claims 1-18 are pending. Claims 1-3, 7-8 and 12-18 are the subject of this appeal and are reproduced in the attached Claims Appendix.

#### IV. STATUS OF AMENDMENTS

Appellants did not make, and the Examiner did not enter, any amendments to the application subsequent to final rejection.

## V. SUMMARY OF CLAIMED SUBJECT MATTER

The following is a concise explanation of the subject matter defined in each of the independent claims involved in the appeal, as required by 37 C.F.R. § 41.37(c)(1)(v). Further, pursuant to 37 C.F.R. § 41.37(c)(1)(v), every means plus function and step plus function as permitted by 35 U.S.C. 112, sixth paragraph, is identified and the structure, material, or acts described in the specification as corresponding to each claimed function is set forth with reference to the specification by page and line number, and to the drawing, if any, by reference characters. However, it is to be understood that portions of the specification not cited herein may further explain and clarify the recited means. In general, the following explanation is not intended to be used to construe the claims, which are believed to speak for themselves, nor do Appellants intend the following explanation to modify or add any claim elements, or to constitute a disclaimer of any equivalents to which the claims would otherwise be entitled, nor is any discussion of certain preferred embodiments herein intended to disclaim other possible embodiments. References herein to the Specification are intended to be exemplary and not limiting.

### A. Independent Claim 1

Independent claim 1 recites a stationary terrestrial/satellite antenna and receiver system for reception of AM, FM, satellite and terrestrial rebroadcast satellite signals that includes a stationary satellite antenna positioned on a surface that receives satellite signals and terrestrial rebroadcast satellite signals, and a stationary terrestrial antenna positioned on the surface that receives AM/FM signals. (See Appellants' specification, page 4, paragraph [0021], lines 1-8; page 5, paragraph [0022], lines 13-16; page 6, paragraph [0025], lines 1-3). The satellite and terrestrial antenna are mounted on a mounting assembly including a low noise amplifier circuit and a bezel, wherein the

bezel is adapted to contain the low noise amplifier. (See Appellants' specification, page 6, paragraph [0025], lines 6-9; page 7, paragraph [0028], lines 7-8). The system further includes a stationary integrated head unit positioned on the surface including an AM/FM terrestrial receiver/tuner human interface and a satellite receiver/tuner human interface, wherein the terrestrial antenna is connected to the AM/FM terrestrial receiver/tuner human interface and the satellite antenna is connected to the satellite receiver/tuner human interface via a conduit. (See Appellants' specification, page 5, paragraph [0023], lines 1-5; page 6, paragraph [0025], lines 2-15).

B. Dependent Claim 12

Dependent claim 12 recited the stationary terrestrial/satellite antenna and receiver system of claim 1 wherein the low noise amplifier circuit includes a satellite low noise amplifier with a first input connected to a first end of a satellite output and wherein the output of the low noise amplifier is the SDARS/SAT/TER cable. (See Appellants' specification, page 8, paragraph [0029], lines 3-7; page 9, paragraph [0030], lines 9-13).



VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Whether claims 1-3, 7-8 and 12-18 are unpatentable under 35 U.S.C. §102(e) over U.S. Patent 6,806,838 to Petros ("Petros").

## VII. ARGUMENT

Claims 1-3, 7-8 and 12-18 were rejected under 35 U.S.C. §102(e) as being allegedly anticipated by U.S. Patent No. 6,806,838 to Petros, et al. ("Petros"). To anticipate a claim, the reference must teach every element of the claim. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). As set forth below, Petros does not teach or suggest each and every element of claims 1-3, 7-8, and 12-18. Accordingly, Appellants respectfully request the Board to reverse the rejection of these claims.

Independent Claim 1

Claim 1 is directed to a stationary terrestrial/satellite antenna and receiver system for reception of AM, FM, satellite and terrestrial rebroadcast satellite signals. The system includes

a stationary integrated head unit positioned on the surface including an AM/FM terrestrial receiver/tuner human interface and a satellite receiver/tuner human interface. (*emphasis added*)

Contrary to the Examiner's assertion (Final Office Action, page 2, second paragraph), Petros does not teach or suggest "a stationary integrated head unit positioned on the surface including an AM/FM terrestrial receiver/tuner human interface and a satellite receiver/tuner human interface" (*emphasis added*), as recited by claim 1.

Rather, Petros discloses a combined satellite and terrestrial antenna system for use in vehicles and structures wherein a satellite antenna is placed concentrically around a conventional

most antenna that can be used for both conventional FM radio and also terrestrial retransmission of the satellite broadcast signals. (Petros, abstract). As best shown in Figure 3, the antenna system of Petros includes a multi-band terrestrial antenna 302 and satellite antenna 304 (collectively combined multi-band terrestrial/satellite antenna 350), a SDARS receiver 314, and a combined head unit and AM/FM tuner 328, which includes an AM/FM tuner 324 and a head unit 320. The SDARS receiver 314 of Petros outputs a signal over SDARS audio cable 330 to the head unit 320. As clearly shown by the system diagram in Figure 3, the SDARS receiver 314 is not part of the head unit 328, or integrated with the AM/FM tuner 324. (Petros, Col. 3, lines 43-58). Indeed, Petros teaches that “in most circumstances, the SDARS receiver ... would be located in the trunk of a vehicle, or if the radio is in a mobile or fixed structure, (it) would be located close to” the antennas. (Petros, Col. 8, lines 22-26). In other words, Petros teaches a radio head unit in communication with a separate SDARS receiver, wherein the SDARS receiver is located remotely from the radio head unit. Therefore, Petros cannot possibly teach or suggest a stationary integrated head unit including an AM/FM terrestrial receiver/tuner human interface and a satellite receiver/tuner human interface, as recited by claim 1.

In the Final Office Action the Examiner suggests (page 3, second paragraph), that reference numeral 328 in Figure 8 of Petros clearly shows a “satellite receiver and radio receiver integrated head unit.” However, as clearly illustrated by Figure 8, and as referred to in the detailed description of Petros, reference numeral 328 is a “combined head unit and AM/FM tuner” and “is comprised of AM/FM tuner 324, and head unit 320.” (Petros, Col. 3, lines 56-58). Moreover, the dotted line in Figure 8 labeled “328” clearly encircles “AM/FM tuner” 324 and “head unit” 320, and does not encircle SDARS receiver 324. In other words, the SDARS/RX satellite receiver, clearly marked as

“SDARS/RX” and labeled as element 314, is shown remote from element 328. Thus, Petros cannot possibly teach or suggest a stationary head unit including a satellite receiver/tuner human interface, as recited by independent claim 1. Therefore, for at least this reason, the rejection of claim 1 should be reversed.

Dependent Claim 12

Claim 12 is directed to the stationary terrestrial/satellite antenna and receiver system according to claim 1, wherein the low noise amplifier circuit includes,

a satellite low noise amplifier with a first input connected to a first end of a satellite output, wherein the output of the low noise amplifier is the SDARS/SAT/TER cable. (*emphasis added*)

Appellants respectfully submit that Petros does not teach or suggest a satellite low noise amplifier wherein the output of the low noise amplifier is a SDARS/SAT/TER cable, as recited by claim 12.

Rather, as shown in at least Figure 7A, Petros discloses a combined satellite terrestrial antenna system having a first low noise amplifier SAT/LNA 704 that outputs to a SDARS/SAT cable 316 and a second low noise amplifier TER/LNA 710 that outputs to SDARS/TER cable 312. (Petros, Col. 8, lines 26–28; Figure 7). In other words, the output of the low noise amplifier in Petros is either a SDARS/SAT cable 312 or a SDARS/TER cable 316, not a SDARS/SAT/TER cable. Therefore, Petros cannot teach or suggest a satellite low noise amplifier wherein the output of the low noise amplifier is the SDARS/SAT/TER cable, as recited by claim 12. For at least this reason, claim 12 is patentable over the cited art and the rejection of claim 1 should be reversed.

### VIII. CONCLUSION

In view of the foregoing, it is submitted that the final rejections of the pending claims are improper and should not be sustained. Therefore, a reversal of the final rejections of March 30, 2007 is respectfully requested.

Appellants believe no fee is due with this paper. However, if a fee is due, please charge our Deposit Account No. 18-0013, under Order No. 65899-0702, for any fee due with this Amended Appeal Brief. To the extent necessary, a petition for extension of time under 37 C.F.R. § 1.136 is hereby made, the fee for which should be charged to the above account.

Dated: December 20, 2007

Respectfully submitted,

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**APPENDIX A**

**Claims Involved in the Appeal of Application Serial No. 10/717,242**

1. A stationary terrestrial/satellite antenna and receiver system for reception of AM, FM, satellite and terrestrial rebroadcast satellite signals, comprising:

a stationary satellite antenna positioned on a surface that receives satellite signals and terrestrial rebroadcast satellite signals;

a stationary terrestrial antenna positioned on the surface that receives AM/FM signals, wherein the satellite and terrestrial antenna are mounted on a mounting assembly including a low noise amplifier circuit and a bezel, wherein the bezel is adapted to contain the low noise amplifier; and

a stationary integrated head unit positioned on the surface including an AM/FM terrestrial receiver/tuner human interface and a satellite receiver/tuner human interface, wherein the terrestrial antenna is connected to the AM/FM terrestrial receiver/tuner human interface and the satellite antenna is connected to the satellite receiver/tuner human interface via a conduit.

2. The stationary terrestrial/satellite antenna and receiver system according to claim 1, wherein:

the satellite signals received by the satellite antenna is SDARS signals.

3. The stationary terrestrial/satellite antenna and receiver system according to claim 2, wherein the satellite antenna comprises:

a quadrifilar helix antenna.

4. The stationary terrestrial/satellite antenna and receiver system according to claim 2, wherein the satellite antenna comprises:

a patch antenna.

5. The stationary terrestrial/satellite antenna and receiver system according to claim 2, wherein the satellite antenna comprises:

a loop antenna.

6. The stationary terrestrial/satellite antenna and receiver system according to claim 2, wherein the satellite antenna comprises:

a coupled-loop antenna.

7. The stationary terrestrial/satellite antenna and receiver system according to claim 1, wherein the terrestrial antenna comprises:

a retractable mast antenna.

8. The stationary terrestrial/satellite antenna and receiver system according to claim 1, wherein the terrestrial antenna comprises:

an AM loop antenna and FM wire antenna.

9. The stationary terrestrial/satellite antenna and receiver system according to claim 1, wherein the terrestrial antenna comprises:

an active AM ferrite antenna.

10. The stationary terrestrial/satellite antenna and receiver system according to claim 1, wherein the terrestrial antenna comprises:

a FM dipole antenna.

11. The stationary terrestrial/satellite antenna and receiver system according to claim 1, wherein the terrestrial antenna comprises:

a folded FM dipole antenna.

12. The stationary terrestrial/satellite antenna and receiver system according to claim 1, wherein the low noise amplifier circuit comprises:

a satellite low noise amplifier with a first input connected to a first end of a satellite output, wherein the output of the low noise amplifier is the SDARS/SAT/TER cable.

13. The stationary terrestrial/satellite antenna and receiver system according to claim 1, wherein the surface is selected from the group consisting of an desk, table, countertop, or window glass.



14. The stationary terrestrial/satellite antenna and receiver system according to claim 1, wherein the satellite and terrestrial antenna are disposed in a housing.

15. The stationary terrestrial/satellite antenna and receiver system according to claim 1, wherein the stationary satellite antenna is concentrically mounted with respect to the terrestrial antenna.

16. The stationary terrestrial/satellite antenna and receiver system according to claim 15, wherein the terrestrial antenna is a retractable terrestrial antenna.

17. The stationary terrestrial/satellite antenna and receiver system according to claim 1, wherein the conduit includes a satellite-cable, a satellite-terrestrial rebroadcast cable and a terrestrial AM/FM cable.

18. The stationary terrestrial/satellite antenna and receiver system according to claim 1, wherein the conduit includes a single element satellite-terrestrial-rebroadcast-satellite cable and a terrestrial AM/FM cable.

**APPENDIX B**

No evidence pursuant to §§ 1.130, 1.131, or 1.132 or entered by or relied upon by the examiner is being submitted.

**APPENDIX C**

No related proceedings are referenced in II. above, hence copies of decisions in related proceedings are not provided.